

**Amendments to the Claims:**

Please cancel claims 2-13 as presented in the underlying International Application No. PCT/EP2004/052317.

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (original): A 4Pi microscope having an interferometer in which two objectives are positioned to oppose one another on different sides of an object plane, and having an optical element for coupling illuminating light into the interferometer and/or for coupling detected light out of the interferometer and for directing it into a detection beam path, wherein a reflecting means is provided that reflects the illuminating light coupled out by the optical element back into the interferometer and/or allows the detected light coupled out by the optical element and directed into the detection beam path to pass through, and another outcoupled detected light portion that is not directed into the detection beam path to be reflected back into the interferometer.

Claims 2-13 (canceled)